

Model FEC120

Please read this entire manual for installation and use of this smoker.
Failure to follow these instructions could result in property damage,
bodily injury or even death.

Contact local building or fire officials about restrictions and installation
inspection requirements in your area.

SAVE THESE INSTRUCTIONS.



Version 14
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Serial Number: _____

Dear Cookshack Customer,

Your Fast Eddy's™ by Cookshack FEC120 will produce great barbecue and smoked foods. It is easy to operate, clean and maintain. Use this operator's manual to familiarize yourself with the smoker and its operation. If you have a question or problem not covered in the manual, call us as **1.800.423.0698** Monday through Friday, 9:00 a.m. to 4:00 p.m CST or email us at info@cookshack.com. You can also join the **Cookshack Barbecue Forum** on our website at www.cookshack.com which has participation by both Cookshack customers and employees.

This unit is NSF and USDA approved, Warnock Hershey and ETL Listed Commercial Cooking Equipment in both the USA and Canada.

You must observe safe operating practices when using the smoker. Cookshack, Inc. assumes no responsibility for results of careless and dangerous operation of Cookshack smokers or other products. All warranties are null and void if the practices described in the Operator's Manual are not observed.

Read the following instructions thoroughly and completely before using your smoker! Observe the instructions carefully. Be certain that you understand completely how it functions before attempting to operate it.

This smoker oven is intended for use as a food smoker. It is not intended for any use not specifically described in this manual. Misuse of this smoker can result in serious injury and a fire hazard.

With these precautions in mind, enjoy your smoker and the delicious foods it will produce.

Stuart Powell



President and CEO
Cookshack Inc.
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General Safety Instructions

This equipment is designed and sold for commercial use only. Only licensed professionals should work on or service this equipment.

A MAJOR CAUSE OF OVEN-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

- Keep the oven free from combustible materials.
- Never store or use gasoline in the vicinity of this oven.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this oven. Keep all such liquids well away from the oven while in use.
- Whenever working on, or servicing this unit **ALWAYS** disconnect the power.
- This oven is equipped with a 3-prong plug for your protection from shock hazard. Always plug this unit directly into a properly grounded 3-prong receptacle.
- **WARNING!** Exterior surfaces may be **HOT!**
- Make sure all operator personnel are instructed on the proper use of the oven.
- Never leave the oven door open while the oven is running.
- Never use a high-pressure washer around electrical components.
- Always clean the drip tray before the cooker is used.
- All switches should be in the “OFF” position before plugging into receptacle.

Included Equipment

Once you have unpackaged your smoker, you should find the following standard equipment:

- Cookbook
- Operator's Manual
- 40 lbs. Pellets
- Casters (pre-installed)
- Set of 2 Side Racks
- 5 Grills
- Spice Kit
 - 1 gal. Spicy Barbecue Sauce
 - 1 gal. Mild Barbecue Sauce
 - 5 lbs. Brisket Rub
 - 5 lbs. Rib Rub
 - 5 lbs. Spicy Chicken Rub
 - 10 oz. Chili Mix
 - 10 oz. Spicy Barbecue Sauce Mix



Scan QR Code to
see FEC120 Set
Up Video

General Installation Instructions

Local Code Officials and a Commercial Kitchen Ventilation Contractor should be consulted prior to installation to determine the need to obtain a permit. Unit must be installed per state and local fire codes and NFPA 96.

WARNING! Unit is very HEAVY, and extra care must be taken when unloading and moving.

Provisions must be made for adequate air supply for the oven. If the oven is to be installed in a sealed room or building utilizing exhaust fans, the room must be supplied with a return air system. Return air must be equal or slightly higher than that of the exhausted air. **WARNING!** Do not pack required air spaces with insulation or other materials.

Flue should be 5 inches in diameter type L-Vent. It is required to extend 3 feet above the highest point where it passes through the roof and at least 2 feet higher than any portion of a building within 10 feet or in accordance with state and local fire codes (NFPA 96). A rain cap must be utilized on a flue exhaust.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

DO NOT CONNECT THIS UNIT TO A FLUE SERVING ANOTHER APPLIANCE.

Attachment and securement of the exhaust venting system to the product and to each adjoining section of connector pipe are required to be fastened with at least three screws.

The unit requires a separate 120 volt, 20 amp circuit. The unit must be grounded in accordance to your local codes or with the National Electric Code ANSI/NFPA 70-1990.

Location

Stationary installation should be on a level surface.

The unit requires adequate air. Ventilation is required for the proper operation of burner and cooking motors.

Keep the oven free from combustible materials. A good rule of thumb is to allow an 18 inch clearance space around oven.

Minimum spacing from combustible material is 6"; these clearances must be maintained unless materials used are non-combustible. Following is the recommended service spacing:

- Top – 18"
- Left Side – 24" to load pellets
- Right Side- minimum of 24"
- Back- 4"
- Front – Must have enough room to open door for loading and unloading of product (approximately 31")
- Floor–Keep combustible material 6" beyond each side of the firebox

Venting

Unit may be installed under a hood in accordance with your local codes. If a hood is not used, then the flue is required to be a minimum five (5) inches in diameter, type “L” pipe and is to extend three (3) feet above the highest point where it passes through the roof. It also needs to be at least two (2) feet higher than any portion of a building within ten (10) feet or in accordance with state and local fire codes (NFPA96). A rain cap must be utilized on a flue exhaust.

When planning your flue, it is important to remember several items:

- It must draw air naturally through the flue.
- The flue should be cleaned every six (6) months.
- One (1) inch clearance from combustible materials.

The installation of a flue will vary depending on the location and local codes; however, the flue should not have more than two (2) ninety-degree elbows in it and should not be longer than thirty (30) feet.

Exhaust Systems

The Fast Eddy's™ by Cookshack FEC120 comes with a standard system which vents smoke out of the oven. It is the customer's responsibility to provide a method to move smoke from this exhaust to the outside following applicable local codes (NFPA 96). This system must remain in place any time the unit is operated inside a building.

Adequate makeup air is required for safe operation. Consult manual for more information. It is your responsibility to maintain essential combustion air at all times during operation.

*****IMPORTANT*** READ CAREFULLY**

Positive Air Flow through the combustion chamber must be maintained for safe and proper operation of the unit.

Burner air flow may be affected by one or a combination of the following.

- Improper flue installation
- Inadequate makeup air for hood system or exhaust fans
- Competing hood systems or ventilation in the building
- Extreme drafts or inadequate clearance.

Please contact Cookshack Customer Service with any questions at **1.800.423.0698** Monday through Friday, 9 AM to 4 PM CST or email us at info@cookshack.com.

Operating Instructions

1. Before starting check the following:
 - Pellets are loaded in pellet hopper
 - **Only 100% hardwood food-grade pellets** should be used in your smoker. Pellets should be no larger than 1/4" in diameter and 3/4" long. Use of heating fuel pellets can be harmful to both the food you are cooking and your smoker.
 - Ensure that the fire pot is clean and clear of ash.
 - Check to ensure there is not a buildup of grease in the bottom of the cooking chamber.
2. Make sure the pellet slide is clean.
3. Push the "START" button on the control panel. Unit has an automatic ignition system.
4. In the event of igniter system failure, use the following manual lighting instructions **WITH OVEN OFF**:
 - Pour 1/2 cup of pellets into the fire pot.
 - Squirt approximately 2 tablespoons of alcohol gel into the fire pot.
 - Ignite with a match. **NOTE: Never attempt to squirt alcohol gel into burning embers. This has the potential for serious injury.**
 - Let the pellets burn for 4 to 5 minutes.
 - Set the thermostat to 180°F.
5. Always preheat the oven to at least 180°F prior to cooking. This should take approximately 10 to 15 minutes.

Control Panel Operation



Figure 1-Control Panel

ALWAYS CLEAN THE FIRE POT BEFORE RESTARTING THE OVEN.

- Recommended cooking times and temperatures are based on full loads with no holding cycle. Larger or smaller loads or the addition of holding time may require adjustment of cooking time and temperature.
- When you think the product is finished, turn the Master Switch to the OFF position. Wait ten minutes before opening the oven door to check the product for doneness.
- When the product is done to your satisfaction, remove from the smoker.
- An audible signal indicates that the cook cycle is complete and that the oven is going to the Hold Temperature Mode.
- In order to see the set cooking temperature, probe temperature or holding temperature, briefly press the corresponding button.

Cook Mode

COOK MODE is for standard operation and is the default mode. In COOK MODE the oven will cook at the set cooking temperature for the set cooking time. At that point, the controller will change to the set holding temperature and remain there until the unit is manually shut down.

1. Turn Master Switch on the oven control panel to the ON position.
2. Set cooking temperature by pressing and holding the COOK TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
3. Set holding temperature by pressing and holding the HOLD TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
4. Set cooking time by pressing and holding the COOK TIME button while using the ADJUST TIME OR TEMP buttons to change settings.
5. Press START.

PLEASE NOTE: The oven temperature displayed while the oven is running is the actual air temperature inside the oven.

Probe Mode

PROBE MODE is used when cooking with the optional meat probe. In PROBE MODE the oven will cook at the set cooking temperature until the internal temperature of the meat reaches the temperature at which the probe is set. At that point, the controller will change to the set holding temperature and remain there until the unit is manually shut down.

1. Connect the two-pin plug with twist lock into the meat probe connector on the control panel.
2. Place the probe end through the door seal and insert probe into the largest piece of meat in the smoker oven.
3. Turn Master Switch on the oven control panel to the ON position.
4. Choose PROBE MODE by pressing the MODE button while pushing the up or down arrow until PROBE MODE flashes.
5. Set cooking temperature by pressing and holding the COOK TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
6. Set holding temperature by pressing and holding the HOLD TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
7. Set probe temperature by pressing and holding the PROBE TEMP button while using ADJUST TIME OR TEMP buttons to change settings.
8. Press START.

Please note that the probe temperature displayed is the internal temperature of the product.

Preset Buttons

- The IQ4 controller is equipped with two “**PRESET BUTTONS**” for easy selection of common settings for popular foods.
- Pressing the button marked **RIBS OR CHICKENS** will make the following settings:
 - Cook Temp 224°F
 - Hold Temp 140°F
 - Cook Time 3 hours
- Pressing the button marked **BRISKET** will make the following settings:
 - Cook Temp 224°F
 - Hold Temp 140°F
 - Cook Time 12 hours
- Once one of these preset buttons has been pushed you may start a cook cycle using these settings by simply pressing “START.”

The “**RESET BUTTON**” is used to clear the current instructions and cause the IQ4 to start over from the beginning.

NOTE: The oven temperature must be below 130°F before it will re-light.

Loading Instructions

- The maximum capacity of this unit is 150 lbs. pork butts, 120 lbs. briskets, 90 lbs. ribs or 30 whole chickens (about 3 lbs. per chicken) per load.
- Do not blanket load (completely load) the bottom rack. Blanket loading the bottom rack prevents adequate airflow inside the unit.
- When cooking large pieces of meat, turn the fat cap down on the bottom rack and up on the upper racks.

Shut Down and Maintenance Procedure

Press the reset button and wait 10 minutes to allow for cooling before opening the smoker then turn the master on/off switch to the “**OFF**” position.

To properly maintain your smoker, consider the following:

- Soot and Fly ash:
 - The products of combustion will contain small particles of fly ash. The fly ash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion such as occurs during startup, shutdown or incorrect operation of the smoker oven will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary.
- Clean ash from the fire pot and combustion chamber weekly or if it appears as if there is a buildup of ash.
- Disposal of ash – Ash should be placed in a metal container with a tight-fitting lid. The closed container of ash should be placed on a noncombustible floor or the ground, well away from all combustible materials, pending final disposal. If the ash is disposed of by burial in soil or otherwise locally dispersed, it should be retained in the closed container until all cinders have thoroughly cooled.
- Clean the racks and inside of cooking chamber with a degreaser. You can power wash grills weekly. (Recommended cleaner is Zep FS10184 Degreaser)
 - **NOTE: PROTECT ALL ELECTRICAL COMPONENTS FROM MOISTURE DURING THIS PROCESS.**
- If the oven is stored outdoors care should be taken to ensure that water does not get into the pellet hopper or controller. Wood pellets expand greatly when wet and will jam the auger system. A cover is highly recommended for this unit (Cookshack's FEC120 Cover Part Number is PV027).
- Brush the Convection fan blades off periodically.

- Clean the pellet slide periodically to prevent pellet dust buildup – Figure 2.



Figure 2 – Pellet Slide Cleaning

Electrical Specifications

110 volts, 60 HZ, single phase, 8 amp service required.

The fire pot igniter element, auger motor and convection fan total to 840 watts.

Auger motor, burner induction fan and convection fan are 4 amps.

Troubleshooting Guide

This is an initial guide for troubleshooting. If any of the following steps do not correct your issue, contact Cookshack Customer Service at 1.800.423.0698.

Trouble	Probable Cause	Solution
Control panel does not power up	Unit is not plugged into a working outlet (110 VAC)	Check the outlet to ensure it is working or plug into alternate source
	High-temperature limit switch tripped	Press the reset button on the back of the hopper Reset limit switch by pushing in on the button
Fire goes out during operation	Pellet hopper is empty	Inspect hopper and clean pellet dust out and fill with pellets
	Auger motor is turning but the auger is not turning	Check shear pin between auger and motor-replace if broken Check auger for binding-clear cause of binding (such as jammed pellets)
	Not enough intake air	Check air intake air fan-if not turning, contact Customer Service If fan is turning, refer to installation instructions and verify that the vent pipe is properly installed
Fire does not light	Excessive pellet feed	Pellet auger is not cycling, contact Customer Service
	Pellet Hopper is empty	Inspect hopper and clean

		pellet dust out, then fill with pellets
	Switch on pellet hopper is not in contact with the lid	Clear pellets so the lid will fully close or adjust the switch to make contact with closed hopper lid
	Dirty fire pot	Open firebox and clean fire pot and try to restart unit
	Trouble with igniter	Open pellet hopper lid and push the start button
		Open the firebox and feel over the pot. If the pot is hot, the igniter is fine. If pot is cold, contact Customer Service.
		You can manually light the unit also-see procedure in startup section
		Check air intake fan-if not turning, contact Customer Service
	Not enough intake air	If fan is turning, refer to the installation instructions and verify that the vent pipe is properly installed
	Temperature is over 130°F	Light manually or wait for oven to cool

Limited Warranty Policy

Cookshack Smoker Ovens are guaranteed to be free from defects in material and workmanship under normal use and when installed in accordance with factory recommendations. **Warranty is voided unless 100% hardwood food-grade pellets are used.**

This limited warranty includes parts and labor for the first 90 days. Following the 90 day period, the two (2) year limited warranty is for parts only.

Cookshack, Inc.'s obligation under this warranty shall be to repair or replace at its option any part deemed defective upon examination by Cookshack, Inc., or its authorized agent, for a period of two (2) years from the date of sale.

Customer must obtain approval from Cookshack, Inc. before performing any service. Cookshack, Inc. is not responsible for any unauthorized service work.

1. The Limited Warranty extends to the original purchaser only.
2. To make claim or request for the Limited Warranty, the original purchaser must notify Cookshack, Inc. Customer Service for instructions as to the repair or replacement of the defective merchandise prior to attempting or contracting for repair of the oven. (See following page for Return Merchandise Policies).
3. The model number and serial number of the Cookshack Smoker Oven must accompany any request for service to the oven.
4. The Limited Warranty shall not apply if the merchandise has been improperly installed; damaged due to abuse, misuse, misapplication, accident; or as a result of service or modification by any other than an authorized Cookshack, Inc. service agent.

There are no express warranties other than the limited warranty stated herein above. No warranties whether express or implied, including, but not limited to, any implied warranties of merchantability of fitness for a particular purpose, shall extend beyond the respective warranty periods described above.

Cookshack, Inc. shall not be liable for any direct, indirect, special, consequential, incidental, or punitive damages; lost profits or loss of use or interruption of business regardless of the form of action or theory of liability resulting from any defect in or use of the Cookshack smoker oven, accessories and/or heating elements.

Additional information on obtaining service under this Limited Warranty is available on the following page or by contacting a Cookshack, Inc. Customer Service Representative directly at (800)423-0698.

Return Merchandise Policy

If you have merchandise that you believe is defective and requires repair or replacement:

1. Call Cookshack, Inc. at (800)423-0698. Ask to speak to a Customer Service Representative. Have your Smoker Oven model number and serial number ready.

If you are advised to return the merchandise to the factory for repair or replacement, please observe the following procedures.

2. You will be issued a return number. A Customer Service Representative will issue you a return number and/or mail you an instruction form (called a Return Merchandise Authorization) for returning the merchandise with the return number on it.

All return merchandise must have a return number. Do not return merchandise without a return number.

3. Attach the return number to the merchandise.

If you were sent a Return Merchandise Authorization, attach it to the merchandise you are returning.

If you were issued an RETURN NUMBER by phone and not sent a Return Merchandise Authorization, attach a note to the merchandise with your name, address and RETURN NUMBER.

Print the RETURN NUMBER on the outside of the return packaging.

4. Ship the merchandise back to Cookshack.

Return the merchandise to Cookshack, Inc., shipping prepaid, F.O.B. destination, in the original container or equivalent.

All return merchandise must be shipped to: Cookshack, Inc., 2304 N. Ash St., Ponca City, OK, 74601.

You assume the risk of any loss or damage that occurs during transit due to improper packaging of the returned merchandise. Use the original container that the merchandise was shipped in or equivalent.

5. Repair or replacement of merchandise under warranty.

Replacement or repairing defective merchandise is at Cookshack, Inc.'s option.

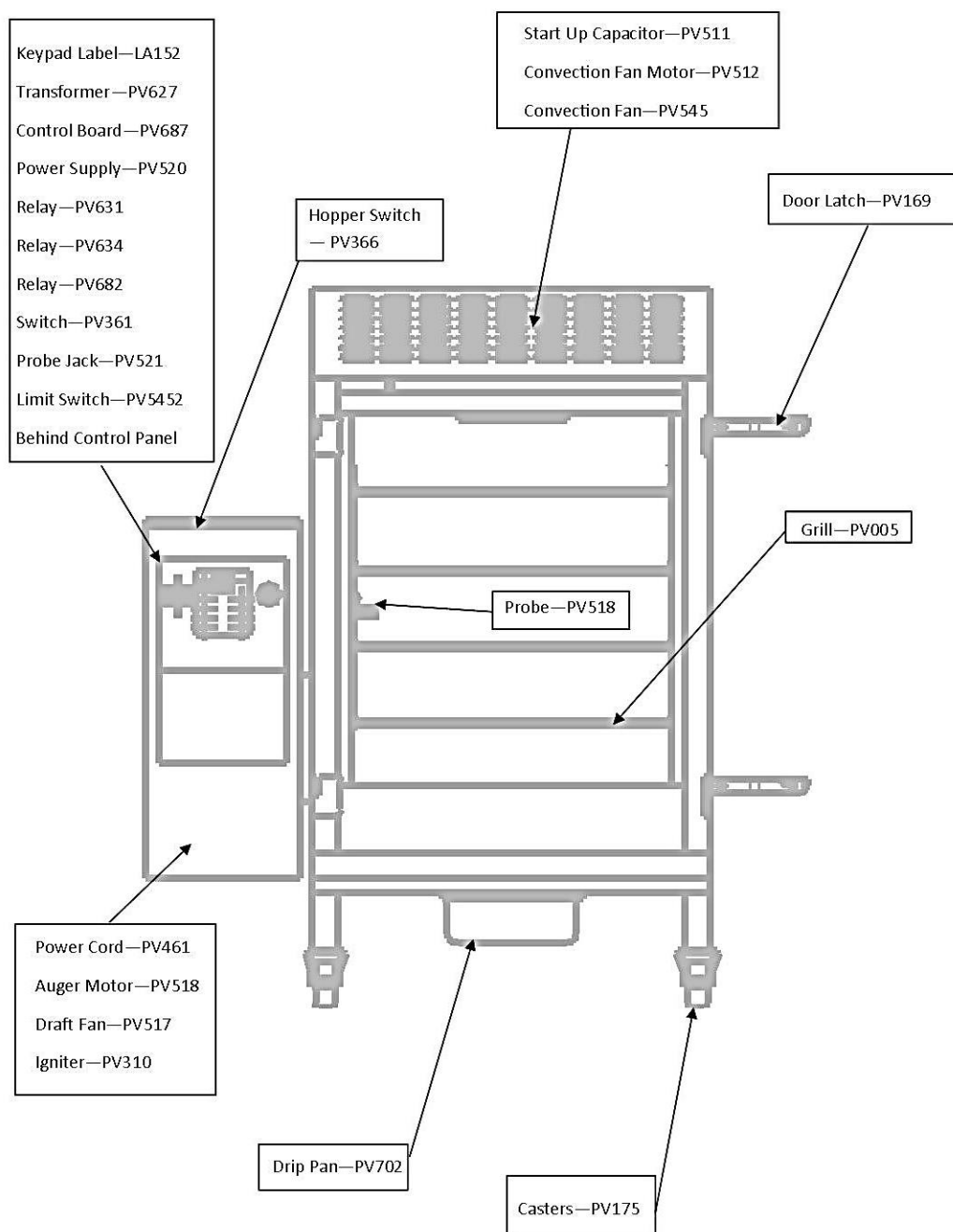
If repair of merchandise is deemed necessary by Cookshack, Inc. you will be instructed as to the necessary arrangements in order to affect the repair of the merchandise.

If replacement merchandise is deemed necessary by Cookshack, Inc. you will be invoiced for the replacement merchandise upon shipment. Credit for merchandise under warranty deemed to be defective by Cookshack, Inc. will be issued upon return of the defective merchandise.

Credit may be denied if the returned merchandise is not found to be defective by Cookshack, Inc.; if it is not under warranty; if it is not received at Cookshack, Inc. 30 days after your RETURN NUMBER is issued; if it is damaged due to abuse, misuse, misapplication or accident; if it has been serviced or modified by any other than an authorized Cookshack, Inc. service agent; is not returned with an RETURN NUMBER; is not in clean condition; is not complete; is damaged or lost in transit.

Replacement merchandise is sent to you via UPS Ground or common carrier. If you request replacement merchandise to be sent by faster service than UPS Ground or common carrier you shall incur the cost of shipping.

FEC120 Illustration



FEC-120 Pellet Smoker